REMARKS

Favorable reconsideration is respectfully requested.

The claims are 1 to 4, 6 to 11 and 18.

The above amendment is responsive to points set forth in the Official Action.

With regard to new claim 8, support is evident from page 14, lines 10 to 22 of the present specification.

Claims 1 to 4 and 6 to 11 have been rejected under 35 U.S.C. 103(a) as being obvious over Japanese Application Publication No. 08-034701, as evidenced by Bussière et al., J. Chem. Biol., 2001, 130(4); 561-568 (Bussière et al.).

This rejection is respectfully traversed.

The present claims are directed to a composition for organ preservation comprising an inulin type fructan as well as a method for organ preservation of organs by employing said-composition.

On page 4, second paragraph of the Official Action, it is pointed out that Akiyo et al. clearly teaches that inulin and mannitol are functionally equivalent sugars for perfusion of organs. However, the working examples of Akiyo et al. do not disclose or suggest a perfusion composition comprising an inulin.

As the Official Action notes, inulin refers to polymers of glucose sugars and fructose sugars. On the other hand, mannitol relates to a sugar alcohol derived from a monosaccharide mannose. Thus, it is apparent that the chemical structure of inulins is very different from that of mannitol.

As can be seen from Comparative Examples 7 to 12 in Table 1 of the present specification, compositions comprising glucose, trehalose or raffinose are actually inferior to that comprising an inulin (e.g. 1-kestose or nystose) with respect to the preservation of organs. While glucose is a monosaccharide, trehalose and raffinose are polysaccharides and have a different chemical structure from inulin. It is apparent that the different types of sugars have different effects concerning the preservation of organs.

Thus, it would not be obvious to one of ordinary skill in the art to select the claimed polymer of sugars from among the many different types of monomers or polymers, in view of its unexpectedly advantageous effect in the preservation of organs.

The Official Action states that it would have been *prima facie* obvious for one skilled in the art, at the time of the invention, to substitute inulin for mannitol in the perfusion composition of Akiyo et al. comprising mannitol and Krebs-Ringer buffer solution but the above unexpected benefits of inulin rebut such *prima facie* obviousness.

While Akiyo et al. teaches a method for maintaining the properties and functions of an organ (i.e. liver or kidney) on the cellular level by perfusing said organ with a composition comprising a sugar liquid such as mannitol, Akiyo et al. discloses that the tissue comprising the organ treated by the first and second solutions should be cooled to the temperature of liquid nitrogen (-80°C) (see claims 19 to 20, paragraph [0019] of Akiyo et al.). In this regard, see the Examiner Interview Summary Record of November 14, 2007 and subsequent reply.

On the other hand, in the present invention, organs should desirably be preserved under the conditions of low-temperature (e.g. 0 to 4°C as recited in new claim 18) with perfusion, and should not be frozen for preservation as in Akiyo et al.

Thus, the presently claimed compositions and method are unobviously different from the compositions and method of Akiyo et al. not only in terms of components but also conditions for preservation of organs.

Bussière et al. clearly fails to overcome the above-discussed deficiencies of Akiyo et al. and the rejection based on their combination is untenable.

Claims 1 to 4 and 6 to 11 have been rejected under 35 U.S.C. 103(a) as being obvious over Kossovsky et al. (U.S. 5,306,508) in view of Belzer et al. (U.S. 4,879,283).

This rejection is also respectfully traversed.

On pages 6 to 7 of the Official Action, it is stated that Kossovsky et al. teaches a red blood cell surrogate comprising nanocrystalline core particles which are coated with an oxygen carrier anchor and that nystose is a suitable oxygen carrier anchor. The Official Action then contends that it would have been *prima facie* obvious for one skilled in the art, at the time of the

invention, to use nystose as the oxygen carrier anchor of Kossovsky et al. along with a solution of Euro-Collins solution, as taught by Belzer et al.

Belzer et al. relates to an organ transplant method including a Euro-Collins solution and a hydroxyethyl starch.

Kossovsky et al. relates to a red blood cell surrogate comprising the core particles which can attach to an oxygen carrier such as hemoglobin. In the red blood cell surrogate, a glassy film, including nystose, is used as an anchor material (in other words, a binder) to attach an oxygen carrier such as hemoglobin to the core particle. Please see column 2, lines 34 to 50 and column 4, lines 26 to 41 of Kossovsky et al. Thus, the composition and method disclosed in Kossovsky et al. is unobviously different from that of the present invention with respect to the manner or context of using nystose and is also very different from the method and composition of Belzer et al.

Additionally, as the rejection recognizes, the working examples of Kossovsky et al. do not disclose or suggest an example wherein nystose is the oxygen carrier anchor located on the surface of the core particle.

Therefore, one skilled in the art would have no motivation to combine Kossovsky et al. with Belzer et al. apart from applicants' own disclosure. Nor would they expect the excellent effects obtained by the presently claimed composition and method.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

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